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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,927	10/20/2000	Richard Stirling-Gallacher	450117-02828	8382

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NEW YORK, NY 10151

EXAMINER

PHU, PHUONG M

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. **UK**

09/692,927

Applicant(s)

STIRLING-GALLACHER, RICHARD

Examiner

Phuong Phu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is responsive to the Amendment filed on 9/12/05.

Claim Objections

1. Claim 27 is objected to because of the following informalities: claim 27 recites the limitation “only the outputs normalized with one of said normalization units are normalized with the time constant factor” It is unclear in the claim whether said “the outputs” are normalized with “the time constant factor” **by** said “one of said normalization units or are normalized with “the time constant factor” **after** said “the outputs” are normalized by said “one of said normalization units. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 17 recites the limitation “**only the one or ones of the plurality of decoding units** provided with data representative of a normalized output from the respective information unit or units of a preceding decoding unit or units of the subsets **are normalized with the time constant normalization factor**”. This limitation is not disclosed in the Specification. It is

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unclear how said “only the one or ones of the plurality of decoding units” can be themselves normalized.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 11-14 and 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

-Claim 11 omits structural/connectional/functional cooperative interrelationships of elements “decoding units” (recited on line 3) to one another.

-Claim 11 omits structural/connectional/functional cooperative interrelationships of element “a respective decoding unit” (recited on lines 4-5) with the previously-recited elements “decoding units”.

-Claim 12 omits structural/connectional/functional cooperative interrelationships of element “a decoding unit” (recited on line 2) with other previously-recited elements (e.g., “decoding units”, “a respective decoding unit”, etc.).

-Claim 13 omits structural/connectional/functional cooperative interrelationships of element “a first decoding unit” and “a second decoding unit” with each other and with other previously-recited elements (e.g., “decoding units”, “a respective decoding unit”, “a subset of the plurality of decoding units”, etc.).

-Claim 21 omits structural/connectional/functional cooperative interrelationships of elements “decoding units” (recited on line 3) to one another.

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-Claim 21 omits structural/connectional/functional cooperative interrelationships of element “the decoding unit” (recited on lines 4-5) with elements “number of decoding units” (recited on line 3).

-Claim 22 omits structural/connectional/functional cooperative interrelationships of element “a decoding unit” (recited on line 2) with other previously recited elements (e.g., “decoding units”, “a number of normalization units”, etc.).

-Claims, (if any) depended on the above claims, therefore are also rejected.

6. Claims 15-20 and 25-30 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01.

-Claim 15 omits steps showing structural/connectional/functional cooperative interrelationships of elements “decoding units” (recited on line 3) to one another .

-Claim 15 omits steps showing structural/connectional/functional cooperative interrelationships of elements “a number of normalization units” (recited on line 4) with the previously recited element “decoding units”.

-Claim 18 omits steps showing structural/connectional/functional cooperative interrelationships of element “a first decoding unit” and “a second decoding unit” with each other and with other previously-recited elements (e.g., “decoding units”, “a number of normalization unit”, “a subset of the decoding unit”, etc.).

-Claim 25 omits steps showing structural/connectional/functional cooperative interrelationships of element “the number of decoding units” (recited on lines 10-11) with other previously recited elements (e.g., “a decoding unit”, “one or more normalization units”, etc.).

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-Claim 25 omits steps showing cooperative interrelationships of elements of “normalization units” (recited line 4), which are the remaining ones of the “normalization units” besides “one of said normalization units” (recited on lines 8-9), with the previously recited element “a decoding unit” (recited on line 3).

-Claims, (if any) depended on the above claims, therefore are also rejected.

7. Claims 11-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-Claim 11 recites the limitation “the number of normalization units” on line 8. The limitation is lack of antecedent basis and/or renders the claim vague on whether said “the number of normalization units” refers to “a number of normalization units” (recited on line 4), or refers to the number of plurality of “normalization unit” associated with “a subset of the plurality of decoding units” (recited on lines 6-7), or refers to the combination of “a number of normalization units” (recited on line 4) and the number of plurality of “normalization unit” associated with “a subset of the plurality of decoding units” (recited on lines 6-7).

-Claim 12 recites the limitation “the normalization unit of a preceding decoding unit of the subset”. This limitation is lack of antecedent basis.

-Claim 12 recites the limitation “the subset” in a phrase “a preceding decoding unit of the subset” on lines 3-4. The limitation is lack of antecedent basis and/or the limitation renders the claim vague on whether the limitation refers to the previously recited element “a subset of the plurality of decoding units” in claim 15, line 6 since the “subset of the decoding units” in claim 15 does not include any element named “a preceding decoding unit”.

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-Claim 15 recites the limitation “the data” (on lines 7 and 8). This limitation is lack of antecedent basis.

-Claim 17 recites the limitation “the one or ones of the plurality of decoding units” on line 2. This limitation is lack of antecedent basis.

-Claim 17 recites the limitation “the respective normalization unit or units” on line 3. This limitation is lack of antecedent basis.

-Claim 17 recites the limitation “the subset” in a phrase “a preceding decoding unit or units of the subset” on lines 3-4. The limitation is lack of antecedent basis and/or it renders the claim vague on whether this limitation refers to the previously recited element “a subset of the decoding units” in claim 15, lines 7-8 since the “subset of the decoding units” in claim 15 does not include any element named “a preceding decoding unit or units”.

-Claim 18 recites the limitations “the data” on lines 4 and 5. These limitations are lack of antecedent basis.

-Claim 19 recites the limitation “the normalization factor or factors” on line 2. This limitation is lack of antecedent basis and/or renders the claim vague on whether the limitation is referred to “a respective normalization factor” (claim 15, line 6), “a normalization factor” (claim 15, line 8), and/or “a time constant normalization factor” (claim 15, lines 9-10).

-Claim 19 recites the limitation “the basis of means of variance of extrinsic information”. This limitation is lack of antecedent basis.

-Claim 21 recites the limitation “the decoding unit”. This limitation is lack of antecedent basis.

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-Claim 22 recites the limitation “the normalization unit” on line 3. This limitation is lack of antecedent basis.

-Claim 22 recites the limitation “the subset” in a phrase “a preceding decoding unit of the subset” on lines 3-4. The limitation is lack of antecedent basis and/or renders the claim vague on whether this limitation refers to the previously recited element “a subset of said output” in claim 21, line 8 since the “subset of said output” in claim 21 does not include any element named “a preceding decoding unit”.

-Claim 25 recites the limitation “the number of decoding units” on lines 10-11. This limitation is lack of antecedent basis.

-Claim 27 recites the limitation “the outputs normalized with one of said normalization units”. This limitation is lack of antecedent basis, and/or renders the claim vague on whether the limitation “one of said normalization units” is referred to the limitation “one of said normalization unit” recited in claim 25, lines 8-9.

-Claim 28 recites the limitation “said normalization factor variable” on line 4. This limitation is lack of antecedent basis.

-Claim 29 recites the limitations “said normalization factor variable” on line 2 and “the basis of means and variance of extrinsic information” on lines 2-3. These limitations is lack of antecedent basis.

-Claims, (if any) depended on the above claims, therefore are also rejected.

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Response to Arguments

8. Applicant's arguments filed on 9/12/05 have been fully considered. However, claims 11-30, after being amended, are deemed not patentable because of reasons set forth in this Office Action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuong Phu

Phuong Phu
11/3/05

**PHUONG PHU
PRIMARY EXAMINER**

Phuong Phu
Primary Examiner
Art Unit 2631